

Subdirecció General de Seguretat Industrial Servei d'Automòbils i Metrologia Secció de Metrologia

# **TEST CERTIFICATE**

## Fifth addition to number E-01.02.C07

#### LOAD CELL TYPE TA-1

Issued by:

Secretaria d'Indústria - Generalitat de Catalunya (Notified Body number 0315)

Avinguda de la Diagonal, 405 bis

E-08008 BARCELONA

**SPAIN** 

In accordance with:

Paragraph 8.1 of the European Standard "Metrological aspects of non-automatic weighing instruments" EN 45501:1992(+AC:1993). The applied error fraction p<sub>i</sub> with reference to paragraphs 3.5.4 and 4.12 of this standard is 0,7. Following paragraph 4.12 of this standard, the tests have been performed according to the OIML

International Recommendation, OIML R 60 (2000).

Issued to:

SENSOCAR, S.A.

Carrer Gèminis, 77, nau 2, P.I.Can Parellada

E-08228 TERRASSA

SPAIN

In respect of:

the model of a load cell, tested as part of a non-automatic weighing instrument.

Manufacturer: SENSOCAR, S.A.. Type: TA-1, versions TA-0 and TA-1.

This fifth addition complements the test certificate number E-01.02.C07, relating to

addition of a new minimum dead load output return in version TA-1.

#### Characteristics:

Version	TA-0											
Classification	C4↓ C6↓											
Maximum number of LC verification intervalsn <sub>LC</sub>	4000 6000											
Maximum capacity E <sub>max</sub>	30	50	75	100	150	200	250	300	400	500	750	kg
Ratio minimum LC verification interval $Y=E_{max}/v_{min}$		T Fig.				15000						
Version			-			TA-1						
Classification						C4↓						
Maximum number of LC verification intervalsn <sub>LC</sub>			71			4000						
Maximum capacity E <sub>max</sub>	40	0	500		750		1000		1500	20	000	kg
Ratiominimum LC verification interval Y=E <sub>max</sub> /v <sub>min</sub>						15000				, , , , , , , , , , , , , , , , , , , ,	- 3	

additional marking

temperature limits -10°C/+40°C

rated output C = 2 mV/V impedance input  $R_{LC} = 350 \Omega$ 

minimum dead load  $E_{min} = 0 \text{ kg}$ 

safe overload E<sub>lim</sub>/E<sub>max</sub>= 150%

The main characteristics are shown in the descriptive annex, which is an integral part of the test certificate and consists of 4 pages. The type is described in the submitted technical documentation, identified with number 15/01. The first addition is described in the submitted technical documentation, identified with number 23/02. The second addition is described in the submitted technical documentation, identified with number 13/04. The third addition is described in the submitted technical documentation, identified with number 17/04. The fourth addition is described in the submitted technical documentation, identified with number 02/05. The changes covered by this addition are described in the submitted additional technical documentation, identified with number 22/06.

For delegation of Secretari d'Indústria

THE HEAD OF THE SERVICE OF AUTOMOBILES AND METROLOGY

Lluís Gasull i Poch

Barcelona, 21 November 2006

Generalitat de Cataluntyn
Departement de Troball I indústria
Secretaria d'Endústria
Subdirecció General de Seguretat Industria
Servel d'Automòbils I Metrologia
Earcelona

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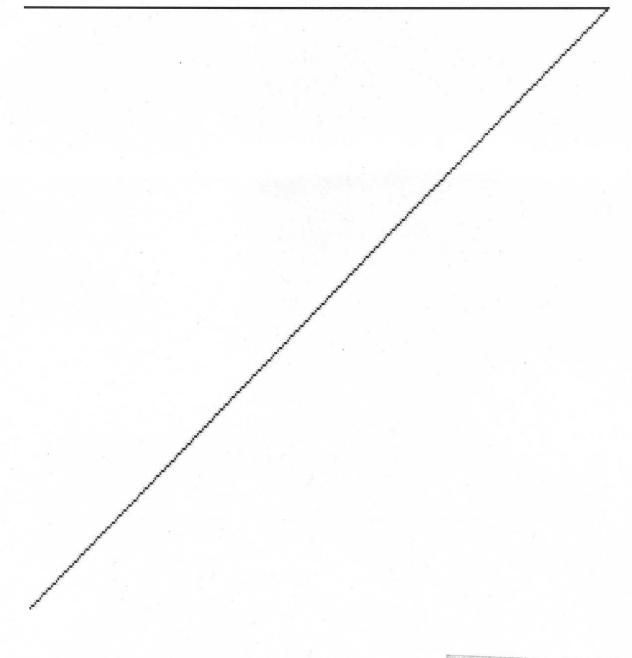
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## Descriptive annex to fifth addition to the test certificate number E-01.02.C07.

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Servei d'Automòbils i Metrologia

Descriptive annex to fifth addition to the test certificate number E-01.02.C07.

#### 1.- Name and type of the instrument.

Load cell type TA-1.

Manufactured by:

SENSOCAR, S.A. Carrer Géminis, 77, nau 2, P.I.Can Parellada E-08228 TERRASSA SPAIN

Using the mark:

**SENSOCAR** 

## 2.- Description of the modification.

This annex to fifth addition to the test certificate number E-01.02.C07 describes a modification of the type TA-1, versions TA-0 and TA-1.

This fifth addition to the test certificate number E-01.02.C07 is relating to addition of a new minimum dead load output return in version TA-1.

This fifth addition to the test certificate number E-01.02.C07 affects paragraph 3.2 of the annex to fourth addition number E-01.02.C07.

Paragraph 2 of the annex to the test certificate number E-01.02.C07 and paragraph 3.1 of the annex to first addition number E-01.02.C07 were modified and replaced for paragraph 3.1 of the annex to fourth addition number E-01.02.C07.

Paragraph 3.1 of the annex to the test certificate number E-01.02.C07, paragraph 3.2 of the annex to first addition number E-01.02.C07, paragraph 3.1 of the annex to second addition number E-01.02.C07 and paragraph 3.1 of the annex to third addition number E-01.02.C07 were modified and replaced for paragraph 3.2 of the annex to fourth addition number E-01.02.C07

Paragraph 4 of the annex to the test certificate number E-01.02.C07 and paragraph 3.3 of the annex to first addition number E-01.02.C07 were modified and replaced for paragraph 3.2 of the annex to second addition number E-01.02.C07.

Paragraph 7 of the annex to the test certificate number E-01.02.C07, paragraph 3.2 of the annex to first addition number E-01.02.C07 and paragraph 3.3 of the annex to second addition number E-01.02.C07 were modified and replaced for paragraph 3.3 of the annex to fourth addition number E-01.02.C07

Figure 3 of the annex to the test certificate number E-01.02.C07 and Figure 3 of the annex to first addition number E-01.02.C07 were modified and replaced for new Figure 3 of the annex to second addition number E-01.02.C07.

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Descriptive annex to fifth addition to the test certificate number E-01.02.C07.

### 3.- Text after modification.

Paragraph 3.1 of the annex to the test certificate number E-01.02.C07, paragraph 3.2 of the annex to first addition number E-01.02.C07, paragraph 3.1 of the annex to second addition number E-01.02.C07, paragraph 3.1 of the annex to third addition number E-01.02.C07 and paragraph 3.2 of the annex to fourth addition number E-01.02.C07 become in paragraph 3.1 of this descriptive annex.

### 3.1.- Metrological characteristics.

Load cell type TA-1, version TA-0, has the following metrological characteristics and information for compatibility of modules:

Version		TA-0										
Classification		C4↓ C6↓										
Additional marking												
Maximum number of number o	LC	4000 6000					-					
Constructive material	S	Steel or stainless steel Steel										
Maximum capacity E <sub>r</sub>	<sub>nax</sub> 30	50	75	100 _	150	200	250	300	400	500	750	kg
Minimum dead load, relative $E_{min}/E_{m}$	ax	Te V	3.3			0						%
Ratio of minimum LC $Y = E_{max}/v_n$ verification interval		15000						-				
Minimum dead load $Z = E_{max}/2D$ output return	R	6000										
Rated output	C	2					mV/V					
Maximum excitation voltage			- 1			15	35					V
Input impedance R <sub>I</sub>	С	350					Ω					
Minimum limit temperature rating $T_n$	nin					-10	U					°C
	nax		1	,		+40				*/		°C
Safe overload $E_{lim}/E_{rr}$		150						%				
F	LC	0,7										

Load cell type TA-1, version TA-0, can have other maximum capacities from 30 kg to 750 kg, respecting always its metrological and constructive characteristics, according to OIML R60.

Load cell type TA-1, version TA-1, has the following metrological characteristics and information for compatibility of modules:

Version				TA	A-1			
Classification			, II, II	С	4↓			
Additional marking				_				
Maximum number of LC verification intervals	$n_{LC}$	4000						
Constructive material		Steel or stainless steel						
Maximum capacity	$E_{max}$	400	500	750	1000	1500	2000	kg
Minimum dead load, relative	$E_{min}/E_{max}$	0					%	



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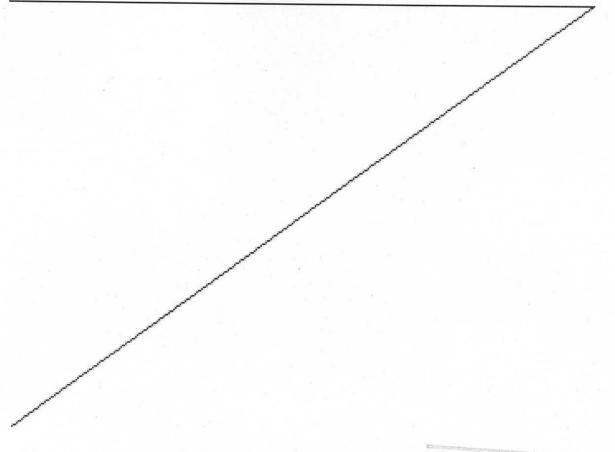
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Ratio of minimum LC $Y = E_{max}/v_{min}$ verification interval	15000	-
Minimum dead load $Z = E_{max}/2DR$ output return	6000	
Rated output C	2	mV/V
Maximum excitation voltage	15	V
Input impedance R <sub>LC</sub>	350	Ω
Minimum limit temperature rating $T_{min}$	-10	°C
Maximum limit temperature rating $T_{max}$	+40	°C
Safe overload $E_{lim}/E_{max}$	150	%
Fraction maximum permissible error $p_{LC}$	0,7	

Load cell type TA-1, version TA-1, can have other maximum capacities from 400 kg to 2000 kg, respecting always its metrological and constructive characteristics, according to OIML R60.

Another characteristics are:

Tolerance of nominal sensitivity	± 0.02	mV/V
Tolerance of input impedance	± 5	Ω



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